ABSTRACT OF THE DISCLOSURE

A partial bit demodulation section demodulates partial bits among a plurality of bits that form one symbol of each modulated signal using a detection method different from likelihood detection. Signal point reduction sections reduce the number of candidate signal points using demodulated partial bits. A likelihood detection section obtains received digital signals by performing likelihood detection based on the Euclidian distances between the reduced candidate signal points and a reception point. Only some bits which are unlikely to be erroneous are found by the partial bit demodulation section, and other bits can be found by the likelihood detection section, enabling bit error rate performances to be effectively improved with a comparatively small computational complexity.